



**PILOT'S OPERATING HANDBOOK AND FAA APPROVED
AIRPLANE FLIGHT MANUAL SUPPLEMENT**

FOR

CIVIL AIR PATROL SPECIAL MISSIONS EQUIPMENT

**CESSNA T206H WITH NAV III AVIONICS AND DUAL GARMIN
1360D AUDIO CONTROL PANELS**

S/N: T20609570

REG. NO.: N724CP

This supplement must be attached to the FAA Approved Airplane Flight Manual when the airplane is modified by the installation of the Civil Air Patrol Special Missions Equipment in accordance with FAA 337 dated 9-17-19.

The information contained herein supplements or supersedes the basic manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this supplement, consult the basic Airplane Flight Manual.

This Airplane Flight Manual Supplement is FAA-Approved by Designated Engineering Representative Ralph W. Rissmiller, DERT-832516-CE, as authorized by the FAA Central Flight Test Section.

FAA APPROVED:


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SECTION 1 – GENERAL

This Pilot's Operating Handbook and Airplane Flight Manual Supplement is intended for use in the Cessna T206H aircraft with NAV III avionics and modified by addition of the following Civil Air Patrol Special Missions Equipment:

- Dual Garmin GMA 1360D Audio Panels
- SEAT SELECT 2/3 Switch Communications Modifications
- Rhotheta/Becker RT600/DF517 Direction Finding System
- Technisonic TDFM-136() VHF/FM Radio
- KGS 28-14 Power Converter System
- Com 3 FM/UHF Audio Switch

The #1 GMA 1360D Audio Panel is powered from the #1 Avionics Bus via the #1 Audio circuit breaker. The #2 GMA 1360D Audio Panel is powered from the #2 Avionics Bus via the #2 Audio circuit breaker. The Technisonic TDFM-136() VHF/FM radio is powered from the #2 Avionics Bus through the MISSION MASTER circuit breaker switch located on the copilot's circuit breaker panel. The KGS 28-14 Power Converter is powered from the #3 28 VDC bus through the 12 VDC circuit breaker switch. The SEAT SELECT 2/3 communications modifications are powered from the #2 Avionics Bus through the SEAT RLY circuit breaker.

DUAL GARMIN GMA-1360D AUDIO PANELS

NOTE

Refer to the G1000 NXi Pilot's Guide for Textron NAV III Series Aircraft (Garmin P/N 190-02177-01, Rev. A or later applicable version) for complete operational instructions.

ICS Operation

The two GMA-1360D Audio Panels are designated as follows:

- GMA #1: Left (pilot's) audio panel
- GMA #2: Right (copilot's) audio panel

In the dual audio configuration, the pilot always hears the audio selected on GMA #1 and the copilot always hears the audio selected on GMA #2.

The Intercom system provides two modes of isolation: CREW ICS and PASS ICS. In the CREW ICS mode, the pilot and copilot can communicate with each other and the passengers are isolated from the crew. In the PASS ICS mode intercom audio from the passengers can be heard on the onside headset and allows passengers to hear the intercom audio from the onside MIC.

SECTION 1 – GENERAL, continued

DUAL GARMIN GMA-1360D AUDIO PANEL, continued

Display Backup and Speaker

The DISPLAY BACKUP and SPKR buttons are functional on the pilot side only. The SPKR and red Display Backup buttons on GMA #2 are disabled.

TEL, MUS 1, MUS 2

Each button selects the corresponding audio source. A solid white annunciation indicates the wired source is active. A solid blue annunciation indicates the Bluetooth source is active.

NOTE

Interference may be observed on the receiving VHF COM transceiver when transmitting on the opposite VHF COM transceiver. This effect is most noticeable when the selected frequencies are within 2 MHz or less of each other.

SEAT SELECT 2/3 COMMUNICATIONS SELECTOR SWITCH

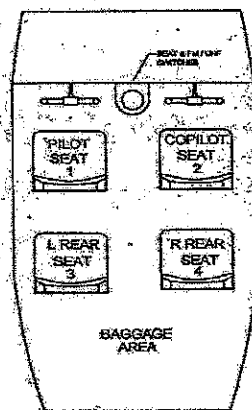
The SEAT SELECT 2/3 communications selector switch allows radio transmissions to be made from either the copilot position (seat 2) or the left rear passenger position (seat 3). A switch/annunciator located in the avionics sub-panel labeled SEAT SELECT 2/3 and an external relay are used to connect either the copilot or passenger seat 3 position to the copilot transmit input on GMA #2. When seat 2 is selected, the copilot position is connected to the GMA #2 COM radio transmit input and the passenger seat 3 position is connected to the passenger ICS input. When seat 3 is selected, the passenger seat 3 position is connected to the GMA #2 COM radio transmit input and the copilot is connected to the passenger ICS input. When seat 3 is selected, the copilot cannot transmit on the radio selected on GMA #2. The states of this switch are:

SEAT SELECT 2/3 SWITCH	CONNECTION TO GMA-1360D #2
seat 2 (copilot)	Seat 2 is connected to the copilot transmit input on GMA #2 Seat 3 is connected to a passenger ICS input on GMA #2
seat 3 (left rear passenger)	Seat 3 is connected to the copilot transmit input on GMA #2 Seat 2 is connected to a passenger ICS input on GMA #2

The pilot has transmit priority on COM 1. The copilot or rear left seat passenger (depending on the selection of the SEAT SELECT 2/3 switch) has transmit priority on COM 2. COM 3 transmit prioritization does not exist.

SECTION 1 – GENERAL, continued

SEAT SELECT 2/3 COMMUNICATIONS MODIFICATIONS, continued



RHOTHETA/BECKER RT600/DF517 DIRECTION FINDING SYSTEM

The Rhotheta/Becker RT600/DF517 direction finding system consists of a receiver/antenna located on the underside of the aircraft empennage and an indicator/controller located in the copilot's instrument panel. The system is designed to point to the origin of radio signals. The audio from the unit is supplied to both audio panels and is accessed using the AUX button on the audio panels.

TECHNISONIC TDFM-136() VHF/FM RADIO SYSTEM

The Technisonic TDFM-136() VHF/FM radio is located in the copilot's instrument panel and is accessed using the COM 3 button on the audio panels.

KGS 28-14 POWER CONVERTER SYSTEM

The KGS 24-14 VDC power conversion system provides 28 VDC and 14 VDC to a connector at the rear right passenger position (seat 4). The system is activated through the AFT ACCESSORY OUTLET circuit breaker switch in the Avionics Circuit Breaker Panel located in the copilot's instrument panel. The 28 VDC output of the system is regulated to 5 amps by an in-line fuse located below the copilot's instrument panel adjacent to the glove box. The 14 VDC output of the system is regulated to 20 amps by a circuit breaker located just aft of the aft cabin wall in the avionics rack area.

COM 3 FM/UHF SELECTOR SWITCH

The COM 3 FM/UHF switch/annunciator is located in the avionics sub-panel. Selection of the desired radio allows control of either the TDFM-136() VHF/FM radio or a UHF radio using the COM 3 button on both audio panels. A UHF radio is not installed in this aircraft and this switch is inactive.

SECTION 2 – LIMITATIONS

APPLICABILITY

This AFMS is valid for N724CP, S/N T20609570 only.

DUAL GARMIN GMA-1360D AUDIO PANELS

The Garmin G1000 NXi Pilot's Guide for Textron NAV III Series Aircraft (Garmin P/N 190-02177-01, Rev. A or later applicable revision), must be immediately available to the flight crew .

RHOTHETA/BECKER RT600/DF517 DIRECTION FINDING SYSTEM

The Becker RT600/DF517 DF System User Manual (Becker P/N 99RE255, Rev. D or later applicable revision) must be immediately available to the flight crew.

The Becker SAR DF517 DF must not be used for primary navigation.

TECHNISONIC TDFM-136() VHF/FM RADIO

The TDFM-136() Installation and Operation Manual (Technisonic P/N I08RE399, Rev. A or later applicable revision) must be immediately available to the flight crew.

KGS 28-14 POWER CONVERTER

The maximum allowable load that can be connected to the AFT ACCESSORY OUTLET connector at seat 4 (right rear) is 28 VDC at 5 amps and 14 VDC at 20 amps.

SECTION 3 – EMERGENCY PROCEDURES

ABNORMAL PROCEDURES

General

Should any of the special mission equipment circuit breaker "trip" or "open" in flight, DO NOT reset the circuit breaker.

1. Affected System(s) **OFF**

Electrical System Malfunction or Failure

If the aircraft experiences electrical system failure:

1. MISSION MASTER Circuit Breaker Switch **OFF**
2. AFT ACCESSORY OUTLET Circuit Breaker Switch **OFF**

SECTION 4 – NORMAL PROCEDURES

SPECIAL MISSIONS EQUIPMENT POWER

Power to the RT600/DF517 Direction Finding system and TDFM-136() VHF/FM radio system is provided through the MISSION MASTER circuit breaker switch.

To turn Special Missions Equipment on:

1. MISSION MASTER Circuit Breaker Switch **ON**

To turn Special Missions Equipment off:

1. MISSION MASTER Circuit Breaker Switch **OFF**

DUAL GMA-1360D AUDIO PANELS

Detailed operating procedures for the dual Garmin GMA-1360D audio system are contained in the G1000 NXi Pilot's Guide for Textron NAV III Series Aircraft.

SEAT SELECT 2/3 COMMUNICATIONS SELECTOR SWITCH

The SEAT SELECT 2/3 switch allows selection of either the copilot (seat 2) or left rear passenger (seat 3) position for interface with the radio selected on GMA #2.

To provide radio access from the copilot position (seat 2) using GMA #2:

1. SEAT SELECT 2/3 Switch..... **SEAT 2**

To provide radio access from the left rear passenger position (seat 3) using GMA #2:

1. SEAT SELECT 2/3 Switch..... **SEAT 3**

NOTE

The copilot will only communicate over the intercom when the SEAT SELECT 2/3 switch is selected to the seat 3 position.

RHOTHETA/BECKER RT600/DF517 DIRECTION FINDING SYSTEM

Detailed operating procedures for the Becker RT600/DF517 DF System are contained in the DF517 DF System User's Manual.

TECHNISONIC TDFM-136() VHF/FM RADIO

Detailed operating procedures for the TDFM-136() VHF/FM radio system are contained in the TDFM-136() Operating Instructions.

SECTION 4 – NORMAL PROCEDURES, continued

KGS 28-14 POWER CONVERTER

The KGS 24/14 VDC power converter/aux power outlet system provides 28 VDC and 14 VDC to a connector at the right rear passenger position (seat 4).

To turn the KGS 28-14 power converter system on:

2. AFT ACCESSORY OUTLET Circuit Breaker Switch **ON**

To turn the KGS 28-14 power converter system off:

1. AFT ACCESSORY OUTLET Circuit Breaker Switch **OFF**

COM 3 FM/UHF AUDIO SWITCH

The COM 3 FM/UHF switch/annunciator is located in the avionics sub-panel and labeled COM 3 FM/UHF. This switch allows selection on both audio panels of either the TDFM-136() VHF/FM radio or a UHF radio on the COM 3 position. This switch is inactive in this installation.

SECTION 5 – PERFORMANCE

No change.

SECTION 6 – WEIGHT AND BALANCE

Refer to the current aircraft weight and balance information.